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Learner Corpora and Embedded Assessment of Undergraduate EFL Writing: The Case of Metadiscourse Markers

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Abstract

The present contribution discusses how a learner corpus can be used to identify learning gaps and plan assessments embedded in teaching and learning activities both inside and outside of the classroom. The learner corpus under investigation is a collection of opinion articles written by undergraduate students with English as a foreign language. A concordancer software was used to generate frequency lists from this collection and perform related searches. A first look at the list of the most frequent n-grams prompted us to consider specific clusters, which seem to relate to the organisation dimension of writing and the use of *metadiscourse*. A closer look at the concordance lines and the collocates for these clusters elicited initial “writing questions,” such as *what patterns of co-occurrence can be found for the search terms?* and *what is the role of these patterns in topic development and argument building?* These same questions can be passed on to the students as part of hands-on activities aimed at encouraging observation, such as short guided searches on the learner corpus, related searches on reference corpora and other learner corpora, and learning logs based on these searches. Ultimately, a learner corpus can be employed to generate continuous formative assessment (including peer- and self-assessment), thus providing students with feedback for improvement and at the same time encouraging them to reflect on their own learning process.

1. Introduction: Writing for Academic Purposes and Using Metadiscourse

The study reported on in this paper stems from a research project funded by the Faculty of Economics and Management of the Free University of Bozen-Bolzano between 2013 and 2015. The project was meant to assess the English as a foreign language (EFL) writing skills of first-year undergraduates in economics at the University. To this end, diagnostic and achievement tests were administered to identify learning gaps and measure advancements of students' productive skills with respect to written academic English. The tests were designed to mirror *the target language use (TLU) domain* (Bachman & Palmer, 2010, p. 60) that may be described as "functioning as a student at the Free University of Bozen-Bolzano attending courses with English as the language of instruction." Writing skills are crucial for students in a trilingual learning environment like at the University: Just as it occurs with Italian and German, one third of all content courses are taught in English and the final exams for these courses are written, not rarely including some kind of extended production. The Faculty of Economics and Management is no exception in this respect, which explains why extended writing tasks were chosen for the tests referred to above.

Selecting a writing task that could be suitable for both the diagnostic and the achievement tests administered to first-year undergraduates was not easy. While academic writing comprises a vast number of genres ranging from notes to dissertations/theses, we were reticent about requiring test-takers to produce any text type that they were unlikely to have been regularly exposed to and unlikely to have practiced at school (e.g., essays). We therefore decided to ask them to write a short opinion article, for two main reasons. On the one hand, besides being a genre that they might already be familiar with (not just from school work but also from autonomous online reading), opinion pieces were – not least because of their moderate length – among the texts used in class as input for reading comprehension activities conducted with test-takers (see sections 3.1 and 3.2 for additional information on the EFL courses of which these activities were part). On the other hand, academic discourse is not

just informative, but also inherently persuasive, as highlighted by studies such as Hyland's (2009), which shows that *persuasion* is part and parcel of the communicative processes constructing both (disciplinary) knowledge and (disciplinary) communities, and at the same time testifies to the growing importance of English as the language of academia worldwide. Against this backdrop, we thought that an opinion article, and the argumentative writing practice that goes with it, would serve as a good testbed for critical thinking skills, which are among the focuses of courses in English for academic purposes (EAP, especially English for general academic purposes, or EGAP; see the introduction to this volume) and, incidentally, also appear – under the heading *making judgements*—within the *Dublin descriptors*, that is, the statements of the typical expectations of achievements and abilities associated with the harmonization of higher education qualifications put forward by the Bologna Process (Bologna Working Group, 2005).

Concerning persuasion and the construction of knowledge, some clarifications are in order. As pointed out by Hyland (2009, p. 13), academic persuasion has to do with how readers (or listeners) are guided to a given interpretation of reality and to how language is used “to relate independent beliefs to shared experience”. This orientation to the reader is common to opinion articles and academic written genres alike and is reflected, among other things, in the pervasive use of *metadiscourse* markers. These comprise “self-reflexive expressions used to negotiate interactional meanings in a text, assist the writer (or speaker) to express a viewpoint and engage with readers as members of a particular community” (Hyland, 2005, p. 37); they therefore fulfil important rhetorical and pragmatic functions. As noted by Dafouz-Milne (2008, p. 97), while metadiscourse markers can “range from a single word (‘probably’) to a full sentence (‘the next point covered in this article deals with the topic of economy’), several sentences or even a whole paragraph,” they can roughly be divided into two broad categories, *textual* and *interpersonal* metadiscourse markers, as we will see in section 4. It is precisely to the use of metadiscourse markers that we decided to turn when exploring the written production of test-takers. In fact, given the latter's level of proficiency, the nature of the task, and the TLU domain (see above, as well as sections 3.1

and 3.2 for more details), the use of metadiscourse markers was found to provide useful insights into students' relative performance in terms of academic writing and precious indications on how to help them address any gaps between achieved and expected results. Patterns of use of metadiscourse by test-takers were analysed in a learner corpus compiled from the test tasks mentioned above. The reasons that prompted us to investigate metadiscourse and the features of the learner corpus will be dealt with at length in 3.1 and 3.2. Before dwelling on the genesis and rationale of the project and on related methodological issues, however, we shall take a closer look at the significance of electronic corpora for language teaching and learning.

2. The Heuristic Value of (Learner) Corpora

Over the past thirty years, a growing number of language researchers, instructors, and students have been engaging with corpus methods, supported by the availability of increasingly powerful compilation and interrogation software and increasingly large and diversified language corpora. The heuristic value of corpus methods is by now beyond dispute, as shown in a considerable body of literature (see Biber, 2006, Partington, 1998; Sinclair, 1991; Stubbs, 1996; Tognini Bonelli, 2001, to name but a few). For instance, corpus data has crucially contributed to shedding new light on language phenomena such as the co-selection of lexis and grammar, which until not long ago had been treated separately in linguistic theory (see, among others, Groom et al., 2015; Hunston & Francis, 2000; Römer & Schulze, 2009).

Undoubtedly, one of the main advantages of corpora – especially large ones – is that they yield reliable information on the frequency and distribution of lexical and syntactic patterns. As pointed out by Granger (2002), “[f]requency is an aspect of language of which we have very little intuitive awareness but one that plays a major part in many linguistic applications which require a knowledge not only of what is possible in language but what is likely to occur” (p. 4). The incredible amount of information on frequency generated by corpora has literally revolutionized the ways we conceive dictionaries, which are

now largely corpus-based,¹ and has had an impact on descriptive grammars, as shown by the ground-breaking *Longman Grammar of Spoken and Written English* (Biber et al., 1999). The revolution lies precisely in the fact that corpora provide evidence not just of what is cognitively feasible, grammatically accurate, and contextually appropriate, but also of what is attested in use. This has paramount socio-cognitive implications for language learning, notably for the development of learners' *competence* and *capacity* (as described by Hymes, 1972 and Widdowson, 1983), that is, both their awareness of how the language is used and their ability to use it (see also Aston, 2001, pp. 3–5).

Based on these characteristics, corpora are a major resource in *data-driven learning* (DDL), which moves from the assumption that the task of the learner is to *discover* the foreign language, and that the task of the language teacher is to provide a context in which the learner can develop strategies for discovery – strategies through which he or she can ‘learn how to learn’” (Johns, 1991, p. 1). This approach to language learning goes hand in hand with the Observe – Hypothesize – Experiment (OHE) paradigm championed by Michael Lewis, whose pedagogic value has been acknowledged by more and more language instructors. In his work on what he called the *lexical approach*, Lewis (1993, 1997) claims that the OHE paradigm is more effective than the Present – Practice – Produce (PPP) model in second language acquisition (SLA), and calls for the inclusion of *lexical items*, that is, words or sequences of words counting as units of meaning, into the input English language teachers should present learners with. While a discussion of the merits and limitations of either the OHE or the PPP model is beyond the scope of the present paper,² we embrace the view that introducing learners to the OHE approach through carefully designed teacher-

1 The first fully corpus-based dictionary is the *Collins COBUILD English Dictionary*, which was first published in 1987 (see <https://collins.co.uk/pages/elt-cobuild-reference-the-history-of-cobuild>)

2 Suffice it to say here that Lewis' theories on language learning have been challenged among others by Ellis (1992), who posits that the PPP paradigm does not necessarily imply adopting solely a deductive approach, and by Golebiewska and Jones (2014), who point out areas of overlap between the OHE and the PPP models, and report on how, under test conditions, the two seem to yield similar results in terms of their effect on learners' receptive and productive knowledge.

guided activities aimed at *chunking* the language, that is, at discovering patterns of use, is likely to enhance their noticing and reflection (see section 4 below for examples).

Ultimately, the OHE paradigm reflects the now widely accepted formulaic view of language whereby native speakers' production heavily relies on the retrieval of prefabricated lexico-grammatical chunks stored in memory (see, among others, Bolinger, 1976; Firth, 1957; Nattinger & DeCarrico, 1992; Pawley & Syder, 1983; Wray, 1999, 2005). Nattinger and DeCarrico (1992) highlight the pragmatic function of these chunks, suggesting that they have a significant role in allowing both native speakers and L2 learners to communicate in a socially acceptable and effective way, thus sharing Lewis' pedagogical proposition for ELT (see above). However, though praised for introducing an innovative approach to ELT practice, the proposal of founding second-language pedagogy on the acquisition of lexical items has drawn some criticism for at least two reasons. First, some have argued that this proposal fails to fully account for the differences between L1 and L2 acquisition processes (see, for instance, Wray, 2000). Second, and more interesting for the purposes of the present paper, some have highlighted the proposal's failure to provide information regarding the selection and categorization of the lexical items to which L2 learners should be exposed (see, for instance, Leech, 1994). What are the criteria that should guide instructors and course designers in choosing the chunks of language to be used in an L2 classroom? This question is relevant at all levels of L2 proficiency and in all settings of L2 acquisition, including universities, where lexical phrases are key to the teaching and learning of languages for specific and academic purposes. It is precisely in answering this question that learner corpora come into play.

Learner corpora are electronic collections of texts produced by second or foreign language learners. The very fact that corpus data come from language learners provides considerable insight in terms of where these learners are in the learning process and what their learning gaps are with respect to the target language use domain (see section 1 above). Learner corpora can be classified based on various parameters, of which, for the purposes of the present paper,

the most relevant are a) the degree of naturalness; b) the time(s) of data collection; and c) the time of pedagogical use (see Granger, 2008, 2013; see also section 3.2 below). Naturalness is probably the fuzziest parameter, as pointed out by Granger (2013, p. 3235), in that learner corpora can range from naturally-occurring learners' communications with other learners or native speakers to language produced to complete more or less open-ended pedagogical tasks. The time(s) of data collection is instead the main feature employed to distinguish between cross-sectional and longitudinal learner corpora. The former "sample language data from different learners at a single point in time," while the latter "track the same learners over a particular time period" (Granger, 2013, p. 3236). Finally, the time of pedagogical use can be immediate or delayed, depending on whether learner corpora are used "directly as teaching/learning materials" for the learners who have produced the data or compiled for later use with "similar-type learners" (Granger, 2008, p. 263). In any case, learner corpora can serve the two distinct but related purposes of describing learners' interlanguage, on the one hand, and generating "tools and methods that more accurately target" learners' needs (Granger, 2008, p. 259), on the other, thus being valuable resources for both research on SLA and foreign-language teaching (FLT).

3. Notes on Methodology

In what follows we will provide a detailed account of how we came to compile the learner corpus on which the present study is based (3.1), as well as a description of its main features and of the tools that were employed to explore it (3.2).

3.1 Genesis and Rationale of the Study

Our initial research project included one diagnostic test and one achievement test administered to all attending students of two first-year EFL specialised language courses (respectively, at the beginning and at the end of the first semester of the 2013–2014 academic year), for which the author of the present

paper served as the main instructor. Both tests consisted in one opinion writing task and were assessed and scored by two trained external raters based on an analytic scoring rubric with different scales covering *overall task fulfilment*, *topic/content control*, *organisation*, and *language control* (see the analytic scoring rubrics for writing detailed in Cushing Weigle, 2002; Purpura, 2004; and Kim & Shin, 2006, among others). Despite the limited size of the sample (143 participants taking both tests), results pointed to some generalised deficiencies concerning the idea development of writing and the related coherence and cohesion of the texts produced. The results of the diagnostic test were informative for making decisions about areas of (further) work, notably argumentative writing, while the results of the achievement test were employed to measure progress, thus also assessing the appropriateness of the course and planning future changes (Brown, 2005), which were implemented the following year.

The achievement subset of the sample was then digitised and used to perform searches at a short demo workshop on corpus methods and tools conducted during the 2014 edition of LUNA (European Researchers' Night) at the Free University of Bozen-Bolzano, as well as during a lesson on hedging held for 2014–2015 freshers attending the specialised English language courses for economics referred to above. A first look at the concordance lines of the most frequent words in the *achievement corpus* and some of the observations made by students during the already-mentioned workshop and lesson, especially on (logical and linguistic) transitions and on (the linguistic features indicating) writer's positioning, encouraged us to collect additional data for more in-depth qualitative analyses of students' writing. The achievement corpus previously obtained was thus enlarged to include 166 further texts, that is, the opinion articles produced for the achievement test administered to the 2014–2015 cohort of students.

This larger corpus of learners' extended productions was employed to perform searches aimed at answering one general research question, namely *what kind of feedback can instructors provide based on learner language output?*, and a more specific one, *what kind of feedback can instructors provide to help students*

use metadiscourse in a textually appropriate and pragmatically and rhetorically effective manner? As seen above, the qualitative analysis conducted on the achievement corpus had two main triggers: a) the external raters who had assessed a diagnostic test taken by the 2013–2014 cohort of students had pointed out students' issues with text organisation, especially regarding their use of logical connectors;³ b) other students, who had been exposed to a subset of the achievement corpus, had inquired about some language features used to express writer visibility in the texts (e.g., self-mentions in combination with thinking verbs). The observations made on metadiscourse markers in the learner corpus led us to construct classroom-based formative assessment activities of the kind described in section 4.

3.2 Data and Tools

In section 2 we have seen that learner corpora are highly heterogeneous, as is learner language, and as are learning situations and learners themselves. That is why, when collecting learner data, setting precise criteria for corpus design and compilation is the only way to build corpora that are both usable and useful.

As already mentioned, our learner corpus (or, in this case, achievement corpus) is composed of *written* texts. It is *local*, in that it was collected as part of regular teaching activities by the teacher herself, and it is representative of a small group of learners (see Granger, 2013, p. 3236), counting 94,696 tokens and 5,060 types in 309 texts (with a 0.053 type-token ratio). These were written by two different cohorts of students, respectively in 2013–2014 and 2014–2015, at the end of a one-semester English course offered at the Free University of

3 The diagnostic test was comparable to the achievement test in terms of task (extended written production), text type (opinion article), and required length (300–350 words), although it was not related to any reading comprehension activity and did not require knowledge of any specialised contents and/or language. Students were expected to write an article recommending the Free University of Bozen-Bolzano to prospective freshers, explaining why the programme they had enrolled in was the best choice, and why the city of Bolzano was an ideal place for university students.

Bozen-Bolzano to first-year undergraduates of the BA programmes in Economics and Management (EM) and Economics and Social Sciences (PPE). To be more precise, the *times of collection* were the end of January 2014 and the end of January 2015, whereas the *time of pedagogical use* (see the examples discussed in section 4), was academic year 2015–2016. The corpus' main statistics are summarized in Table 1. For the purposes of the present paper, the corpus was not annotated, and the data were saved in a *plain-text format*, after having been transcribed from students' handwritten texts without any editing (i.e., without any error correction).

Table 1 – The achievement corpus at a glance.

| <i>Achievement Corpus</i> | | | |
|---------------------------|---------------|-------------|-----------|
| 309 texts | 94,696 tokens | 5,060 types | TTR 0.053 |
| <i>2014</i> | | <i>2015</i> | |
| 143 texts | 103 EM | 166 texts | 124 EM |
| | 40 PPE | | 42 PPE |
| tokens | 45,345 | tokens | 49,351 |
| types | 3,607 | types | 3,131 |

The texts were produced in response to writing tasks a) and b) below as part of the course final exam:

a) *2014 exam question*

According to Irina Feygina, a social psychologist who studies environmental policy issues, “releasing comprehensive information about gas drilling problems is important because the debate is no longer about just science but trust,” and losing public trust is “a surefire way to harm” the reputation of any business. You have been asked to write an article for the “Technology & Environment” section of the Free University of Bozen’s monthly magazine commenting on this statement and giving your own views on gas drilling-related opportunities and problems.

Please write your article in 300-350 words in an appropriate style. You have 60 minutes.

b) *2015 exam question*

In the past year, many US businesses have responded to Obama's call by raising their minimum wage above the level required by law. Randy Garutti, CEO of Shake Shack restaurant chain, explains why his company has increased wages: "Our turnover is lower, we can hire the best, they stay longer, and we can grow them into management. If the team feels taken care of, then they'll go out and take care of the guests."

Write a short opinion article commenting on this statement and giving your own views on the effects of minimum wage raises on employment.

Please write your article in 250-300 words in an appropriate style. You have 60 minutes.

In both cases, the writing task came after a set of reading comprehension tasks, which in turn followed a text on one of the topics covered during the course (respectively, gas drilling in a and minimum wage raises in b). While dealing with different topics, the two writing tasks (similarly to the reading texts they were based on) share a number of features, which mirror the EAP/ESP nature of the courses for which they were designed. Moving from a statement by an expert on a given activity/measure, they require learners to write an opinion article discussing the benefits and drawbacks of such activity/measure. In both cases, students are expected to write texts that are relatively formal in style, although addressing an audience of non-experts, and contain semi-technical vocabulary pertaining to a given subject area. Finally, both writing tasks impose the same constraints in terms of allotted time and required length.

As to the profile of test-takers, all students were enrolled in the first year of either the BA in EM or the BA in PPE (see Table 1). They were all speakers of EFL with similar levels of proficiency. To be more precise, at the time the achievement test was administered, all of them had already obtained a certificate of English proficiency at an upper-intermediate level (level B2 of the

Common European Framework of Reference for languages) issued either internally (after taking a test administered by the University's Language Centre) or externally (after taking internationally recognised tests such as Cambridge FCE or CAE, IELTS, or TOEFL), as required by the University's language policy. In line with its international profile, test-takers declared themselves native speakers of different languages, as follows: Italian (53.8%), German (28.7%), Ladin (4.2%), both German and Italian (3.5%), other (7.7%, including Basque, Finnish, Portuguese, Punjabi, Spanish, Ukrainian, and Urdu), no reply (2.1%).

The corpus was searched using WordSmith Tools and AntConc.⁴ Both sets of tools have a very user-friendly interface, which students can use to investigate language patterns in texts by observing the search word or phrase in context and studying its collocations. These functions open a series of possibilities for learners and teachers alike, in terms of exploring the language produced by learners themselves and comparing it with the language produced by other learners and/or native speakers, as we will see in what follows.

4. Using Corpora to Explore Metadiscourse in Learners' Writing

In section 1, we mentioned that metadiscourse markers can be grouped into two macrocategories, as identified by Dafouz-Milne (2008), *textual* and *interpersonal*. The former refers to the organisation of discourse and includes seven sub-categories: logical markers, sequencers, reminders, topicalisers, code glosses, illocutionary markers, and announcements (Dafouz-Milne, 2008, p.

4 The former is an integrated suite of programmes that includes a concordancer, a keyword generator, and a wordlist generator. The latter, which is also a concordancer-type software, while permitting less sophisticated searches, is free of charge, which makes it highly appreciated by students. WordSmith Tools and AntConc are downloadable respectively from: <http://www.lexically.net/wordsmith/> and <http://www.laurenceanthony.net/>. For further details on WordSmith Tools, see Scott (2001, 2008). For additional information on AntConc, see Anthony (2005, 2013).

98). The latter refers instead to the “writer’s stance towards both the content in the text and the potential reader” (Dafouz-Milne, 2008, p. 97) and comprises five sub-categories: hedges, certainty markers, attributors, attitude markers, and commentaries (Dafouz-Milne, 2008, p. 99; see Figure 4 below).⁵ In 4.1 and 4.2 we shall discuss some examples of textual and interpersonal meta-discourse markers.

4.1 Textual Metadiscourse Markers

A preliminary look at the most frequent n-grams in the achievement corpus prompted us to consider specific clusters, as those circled in Figure 1.

AntConc 3.4.1w

File Global Settings Tool Preferences Help

Corpus Files

| Concordance | Concordance Plot | File View | Clusters/N-Grams | Collocates | Word List | Keyword |
|---------------------------|------------------|-----------|--------------------|-----------------------------------|-----------|---------|
| Total No. of N-Gram Types | | 249735 | | Total No. of N-Gram Tokens 281298 | | |
| Rank | Freq | Range | N-gram | | | |
| 1 | 183 | 91 | the minimum wage | | | |
| 2 | 122 | 85 | a lot of | | | |
| 3 | 104 | 75 | in order to | | | |
| 4 | 101 | 96 | on the other | | | |
| 5 | 92 | 42 | oil and gas | | | |
| 6 | 87 | 45 | a minimum wage | | | |
| 7 | 85 | 84 | the other hand | | | |
| 8 | 83 | 82 | on the other hand | | | |
| 9 | 71 | 69 | in my opinion | | | |
| 10 | 68 | 55 | gas drilling is | | | |
| 11 | 63 | 49 | i think that | | | |
| 12 | 63 | 62 | of shake shack | | | |
| 13 | 63 | 55 | one of the | | | |
| 14 | 60 | 42 | about gas drilling | | | |
| 15 | 59 | 48 | take care of | | | |
| 16 | 56 | 56 | ceo of shake | | | |
| 17 | 55 | 55 | ceo of shake shack | | | |
| 18 | 55 | 40 | minimum wage is | | | |
| 19 | 53 | 32 | of gas drilling | | | |

Figure 1 – Most frequent n-grams in the corpus (AntConc).

5 These two, textual and interpersonal, categories align with what Thompson (2001) has called respectively *interactive* and *interactional* resources.

We noticed that of the 101 occurrences of “on the other” (which ranks fourth on the list of the most frequent clusters) only 83 were followed by “hand,” as in the *textual metadiscourse marker* “On the one hand... on the other...,” which Dafouz-Milne (2008, p. 98) subsumes under the functional subheading she calls *sequencers*. We then generated concordance lines for “on the other” and found that, of the remaining 18 occurrences, 12 were followed by “side” (see also Figure 2).⁶

| Concord | | | | | | | | | | | | | | | | | | | |
|---|------------|--------------|----------|-----|-------|-------|-------|-------|----|----|----|----|----|--------|----|----|----|----|----|
| Edit View Compute Settings Windows Help | | | | | | | | | | | | | | | | | | | |
| N | Word | With | Relation | Set | Texts | Total | Total | Total | L5 | L4 | L3 | L2 | L1 | Centre | R1 | R2 | R3 | R4 | R5 |
| | | | | | | | Left | Right | | | | | | | | | | | |
| 1 | ON THE OT- | on the other | 0.000 | | 96 | 101 | 0 | 0 | | | | | | 101 | | | | | |
| 2 | HAND | on the other | 0.000 | | 82 | 83 | 0 | 83 | | | | | | | 83 | | | | |
| 3 | THE | on the other | 0.000 | | 22 | 24 | 5 | 19 | 1 | 3 | | 1 | | | | 10 | 1 | 2 | 6 |
| 4 | A | on the other | 0.000 | | 19 | 19 | 7 | 12 | 2 | 4 | 1 | | | | | 1 | 2 | 5 | 4 |
| 5 | ARE | on the other | 0.000 | | 15 | 16 | 1 | 15 | | | 1 | | | | | 1 | 11 | 1 | 2 |
| 6 | IT | on the other | 0.000 | | 13 | 15 | 2 | 13 | | | | | 2 | | 1 | 11 | | 1 | |
| 7 | THERE | on the other | 0.000 | | 14 | 14 | 0 | 14 | | | | | | | 1 | 13 | | | |
| 8 | IS | on the other | 0.000 | | 14 | 14 | 1 | 13 | 1 | | | | | | | | 7 | 2 | 4 |
| 9 | THAT | on the other | 0.000 | | 13 | 13 | 0 | 13 | | | | | | | | | | 9 | 4 |
| 10 | SIDE | on the other | 0.000 | | 12 | 13 | 1 | 12 | 1 | | | | | | 12 | | | | |
| 11 | TO | on the other | 0.000 | | 11 | 11 | 3 | 8 | 1 | 1 | 1 | | | | | 1 | | 3 | 4 |
| 12 | OF | on the other | 0.000 | | 10 | 11 | 5 | 6 | 1 | 2 | | 2 | | | | 2 | | 4 | |
| 13 | BUT | on the other | 0.000 | | 11 | 11 | 11 | 0 | | | | | 11 | | | | | | |
| 14 | GAS | on the other | 0.000 | | 10 | 10 | 3 | 7 | 1 | 1 | 1 | | | | 1 | 4 | | 1 | 1 |
| 15 | ALSO | on the other | 0.000 | | 8 | 8 | 0 | 8 | | | | | | | | | 1 | 7 | |
| 16 | HAVE | on the other | 0.000 | | 8 | 8 | 1 | 7 | | | 1 | | | | | | 5 | 2 | |
| 17 | WE | on the other | 0.000 | | 8 | 8 | 0 | 8 | | | | | | | | 7 | | 1 | |
| 18 | BE | on the other | 0.000 | | 7 | 7 | 0 | 7 | | | | | | | | | 1 | 5 | 1 |
| 19 | COULD | on the other | 0.000 | | 7 | 7 | 1 | 6 | | | 1 | | | | | 1 | 3 | 2 | |
| 20 | PEOPLE | on the other | 0.000 | | 6 | 7 | 2 | 5 | 1 | | | | 1 | | | 3 | | 1 | |

Figure 2 – Collocates for “on the other” (WordSmith Tools).

At the same time, the cluster “the other hand” struck our attention for being slightly more frequent than “on the other” (85 vs 83 occurrences) and, when we looked at its collocates in position 1R, we found that two students had used the preposition “in” instead of “on.” Given these slight differences in wording, we moved on to look for the first-part component of the sequencer, that is, “on the one hand,” to see how frequent it was and whether it had alternative forms. We found only 13 occurrences of “on the one hand,” but we found 19 of “on one hand;” taken together, these 32 occurrences were retrieved from 32 different texts, 30 of which also included the second-part component of the sequencer under investigation, that is, “on the other (hand).” Surprisingly, this left 53 occurrences (64%) of the second-part component “on the other

6 5 were followed by a punctuation mark (4 commas and 1 full stop) and 1 by “end”.

hand” without the first-part component “on (the) one hand.” Similarly, when we checked how many “on the other side” were preceded by “on (the) one side,” we could only find 3, leaving the other 9 without a first-part component. We drew on these and other observations (e.g., we noticed that students had used both components either in sentence-initial position or within the sentence, and some of them had employed “on the other (hand)” immediately after “but” or “however”) to formulate a set of writing questions, as exemplified by the following list:

- *What is/are the right wording(s)? (On (the ?) one hand/side ?... on (the ?) other hand/side ?)*
- *Is this a fixed or semi-fixed expression? (Do different versions of it have different meanings?)*
- *What is its position within the sentence?*
- *Can I omit/replace any of the components? Does that depend on the position of the expression within the sentence?*

These and similar questions can be passed on to students as part of a classroom activity consisting in the following steps: 1) guided searches on the above-mentioned clusters in the learner corpus; 2) related searches in large reference corpora such as the British National Corpus (BNC) and the Contemporary Corpus of American English (COCA; to see, for instance, whether “on the one side... on the other” is attested in use and whether it means the same as “on the one hand... on the other;” or to see how often the second-part component “on the other hand” is used without the first-part component “on (the) one hand”);⁷ 3) learning logs based on the observations made in step 1) and step 2) and written following the outline provided by the questions themselves.

7 Free search interfaces for the BNC and the COCA corpora are available respectively at: <https://corpus.byu.edu/bnc/> and <https://corpus.byu.edu/coca/>. For the BNC, see also Burnard and Aston (1998), as well as documentation available at: <http://www.natcorp.ox.ac.uk>, especially Burnard (2007). For the COCA, see Davies (2009, 2010), among others.

4.2 Interpersonal Metadiscourse Markers

A more in-depth look at students' individual productions revealed a somewhat inconsistent use of *interpersonal metadiscourse markers* (Dafouz-Milne, 2008, p. 99), as shown in Figure 3. For ease of reference, the colours with which we have circled the markers under investigation are the same as those used in Figure 4 to highlight the corresponding categories in Dafouz-Milne's (2008) taxonomy.

1. Fellow students, I'm sure gas drilling can seem from an economic point of view at least, a fairly safe bet.
2. All in all, it might be said that this incentive will surely not disappoint anyone. On the contrary all party will benefit from it, seizing from this opportunity.
3. In general it can be said that if the country or state is not in a recession and firms are making profits large enough to compensate rising labour costs, or the wages paid by most employers are already above the minimum wage, rising the minimum wage might be a good idea.

Figure 3 – Examples of interpersonal metadiscourse markers in the corpus.

| Interpersonal metadiscourse markers | | |
|--|---|--|
| Macro-category | Subcategory | Examples |
| ➔ Hedges Express partial commitment to the truth-value of the text | Epistemic verbs Probability adverbs Epistemic expressions | May / might / it <u>must</u> be two o'clock Probably / perhaps / maybe It is likely |
| ➔ Certainty markers Express total commitment to the truth-value of the text | | Undoubtedly / clearly / certainly |
| Attributors Refer to the source of information | | 'x' claims that... / As the Prime Minister remarked |
| ➔ Attitude markers Express writers' affective values towards text and readers | Deontic verbs Attitudinal adverbs Attitudinal adjectives Cognitive verbs | Have to / we <u>must</u> understand / needs to Unfortunately / remarkably / pathetically It is absurd / <u>it is surprising</u> I feel / I think / I believe |
| Commentaries Help to establish reader-writer rapport through the text | Rhetorical questions Direct address to reader Inclusive expressions Personalisations Asides | What is the future of Europe, integration or disintegration? <u>You must understand, dear reader</u> <u>We all believe/let us summarise</u> What the polls are telling <u>me</u> / I do not want Diana (<u>ironically for a Spencer</u>) was not of the Establishment |

Figure 4 – Interpersonal metadiscourse categories (Dafouz-Milne, 2008, p. 99).

In Example 1, leaving aside the initial address term (which is probably more appropriate in a speech rather than in a written opinion article), the reader

will probably be struck by the combination of the *attitude marker* “I’m sure” and the *hedge* “can seem,” whose levels of epistemic certainty are undoubtedly discordant. Given that the writer further hedges her/his statement with the stance adverbial of limitation (see Biber et al., 1999, p. 863) “from an economic point of view at least” and the downtoner (see Biber et al., 1999, p. 555) “fairly” preceding the noun phrase “safe bet,” the reader may be left to wonder whether the writer has deliberately used the attitude marker containing a self-mention and an adjective expressing certainty before a series of hedging devices, or is instead not fully aware of the rhetorical effects that the combination of these interpersonal metadiscourse markers may have (for instance, resulting in an overemphatic and thus ironic statement).⁸ To further investigate this issue, we looked for the attitude marker “I am/I’m sure” in a large learner corpus compiled in the 2000s, namely the Michigan Corpus of Upper-level Student Papers (MICUSP), a record of around 830 A grade papers (roughly 2.6 million words) from a range of disciplines.⁹ Before performing the search, we ticked the partition “argumentative essay” under the research parameter “paper type,” leaving all other parameters (student levels, nativeness, textual features, and disciplines) unselected. If we exclude two quotations, we obtained only one hit for “I am sure” and one hit for “I’m sure,” neither of which were followed by the modal “can” in combination with the introductory verb “seem,” or by other hedging devices.

If Example 1 may be somehow open to interpretation, Example 2 shows rather clearly that putting together mitigating and reinforcing devices may generate confusion over the standpoint for which the writer is arguing. The reader is likely to be caught off guard by the *hedge* “it might be said” followed by the

8 The writer will in fact move on by expressing her/his doubts about gas drilling being safe, and will do so by introducing the following sentence with the adversative “but” and by switching to the inclusive first-person plural pronoun “we” (“But before we jump ahead... we should first be well informed.”).

9 The disciplines covered relate to four academic divisions (Humanities and Arts, Social Sciences, Biological and Health Sciences, Physical Sciences) of the University of Michigan. MICUSP is freely available through an online search and browse interface available at: <http://elicorpora.info>. On the MICUSP, see also Römer and Wulff (2010).

certainty marker “surely,” which, together with the litotes “will not disappoint anyone” and the contrastive marker “on the contrary,” make the sentence rather wordy and the line of argument somewhat fuzzy. In addition, if we search the MICUSP for concordances of “surely” (again in argumentative essays), we will find that this adverb and hedges like “it might/may be said” never occur within the same sentence (see Figure 5 for sample concordances). Example 2 is rather similar to the examples discussed in Thompson (2001), which show how devices used to signal different voices (the writer’s, reader’s, or other’s) in the text may be misleading, causing a clash between actual and expected reading.

| | | | |
|-------------|---|------------|---------------------|
| | <p>than it would be for us to hold others, then he can't strictly hold that all moral judgments are false. When presented with this, I'm not inclined to think Mackie simply doesn't realize that in making his moral pronouncements he's unknowingly (or worse, knowingly) making what he earlier describes as a false claim. It seems more likely that he is overly rash in baldly declaring, "There are no objective values," when, really, he only attempts to (successfully, in my opinion) refute the existence of the sort of objective values implied by our common ideas of categorical rightness and wrongness (Mackie, 446). But there are, or could potentially be, I think, objective values of the more hypothetical sort, which I think Mackie is committed to in asserting that it would be better for us to believe in one set of moral claims rather than another. And these, I would assert, surely exist in the trivial way that one really "ought" to move in certain ways if one wishes to win a game of chess.</p> | | |
| PHI.G0.07.2 | The Doctrine of Double Effect and Intuitions Regarding Hiroshima and Nagasaki | Philosophy | Argumentative Essay |
| 1 of 2 hits | <p>1. At this point it seems that one must try to distinguish the bombing of Hiroshima and Nagasaki from an ordinary terror bombing - surely if our intuitions tell us that one is right and the other wrong, there must be some morally significant difference between the two. We might appeal to circumstances that arise specifically in wartime between sovereign states - perhaps certain things are moral permissible when done to bring about an end to a prolonged state of war. This reading only makes sense, however, if we construe the TB as something other than an agent working on behalf of one sovereign state against another. But Quinn's TB appears to be a pilot working for a sovereign state - we are to understand him as a pilot just like the strategic bomber. In any case, if we fairly apply the principles of DDE, it ought to make no difference whether the TB works for a state at war with another state or for a terrorist organization. I think that when presented the question, "is it morally permissible for military personnel to specifically target civilians if they have good reason to believe that the deaths of civilians will demoralize the enemy, bring the war to an end, and thereby reduce the overall loss of life," intuition will generally leads us to say no.</p> | | |
| PHI.G1.01.1 | Can a lump of clay and a statue be identical? | Philosophy | Argumentative Essay |
| 1 of 3 hits | <p>1. Here, the two-thinger might draw a parallel to casual talk about other aesthetic objects - such as songs, poems, and stories. Take the statement "my poem is written in black ink". As in the case with the statue and the clay, it looks like one is here making a claim about the aesthetic object (my poem). Yet the two-thinger might argue, one is not actually referring to the aesthetic object (my poem), but rather to the words on the page that constitute my poem in this case. And this might very well make sense. For it is surely possible that I could reproduce the very same poem in red, blue, or green ink just as Whitman's poem "Song of Myself" is re-produced in many different books that contain different colors of ink. In short, then, the two-thinger might argue that when we correctly analyze our discourse about a "poem's" or a "statue's" properties, we find that we are not actually committed to it having the properties that would lead to patently false beliefs. To put it in more general terms, the two thinger's response to this first objection is this: she is not committed to the veracity of patently false scenarios because the properties that the two non-identical objects have in common are different than what might initially seem to be the case.</p> | | |
| PHI.G1.02.1 | A Defense of Ontological Relativity | Philosophy | Argumentative Essay |
| | <p>1. Note that, despite the underdetermination, we can still have scientific justification to determine which of these opposing theories is true. Simplicity, parsimony and even falsifiability come up as virtues of Modern Physics that Newtonian Physics lacks. Surely many other considerations come to the defense of Modern Physics, but for this we need a scientist to tell. In any case, there is a fact of the matter as to whether Modern Physics is true or if Newtonian Physics is correct. For instance, there is a fact of the matter whether there are protons, electrons, quarks and even super strings.</p> | | |

Figure 5 – MICUSP sample concordances of “surely.” (<http://elnicorpora.info>)

Example 3 is slightly different from the previous two, in that what emerges is not a contrast between modulating devices going in opposite directions (i.e., mitigation vs. reinforcement), but, arguably, an overuse of hedging. The introductory impersonal construction “it can be said” already works in the direction of deresponsibilising the writer with respect to the truth-value of the proposition “raising the minimum wage is a good idea,” which is further

hedged by the modal “might” (the actual text being “rising [sic] the minimum wage *might be* a good idea;” emphasis added) and the preceding if-clauses, which limit the validity of the writer’s statement to specific conditions. Again, turning to a larger learner corpus of academic written English is likely to provide insight into how interpersonal metadiscourse markers can be used to express stance. For instance, students may be asked to look for collocations of the construction “it can be said” in the British Academic Written English Corpus (BAWE), a collection of proficient university-level student writing created in the UK at about the same time as the MICUSP.^{10 11} Among other things, they can be asked to see whether “it can be said” occurs with markers of the kinds accounted for in Figure 4, such as “perhaps” in one of the examples shown in Figure 5. As a next step, students may be encouraged to experiment with their academic writing by rephrasing portions of their own articles, using different interpersonal metadiscourse markers, and then comparing different versions and discussing them with their peers (as explained in 4.1, the instructor can facilitate discussion through guiding questions like *which statement(s) express(es) doubt, and which one(s) certainty?*), or even interview native speakers and/or experts at their faculty/department to obtain “qualified opinions” on the rhetorical decisions made.

10 BAWE contains just under 3000 good-standard student assignments (6,968,089 words) in four broad disciplinary areas (Arts and Humanities, Social Sciences, Life Sciences and Physical Sciences) at both undergraduate and graduate levels. The corpus can be searched online via the Sketch Engine open site: <https://ca.sketchengine.co.uk/open/>. On the BAWE, see also Alsop and Nesi (2009) and Nesi (2011).

11 Another corpus that may be used as a reference for academic-writing related searches is the Louvain Corpus of Native English Essays (LOCNESS): <http://www.learnercorpusassociation.org/resources/tools/locness-corpus/>.

The screenshot shows the Sketch Engine web interface. The search bar at the top contains the query "it can be said" and the corpus is set to "British Academic Written English Corpus (BAWE)". The left sidebar lists various navigation options: Home, Search, Word list, Word sketch, Thesaurus, Sketch diff, Corpus info, My jobs, User guide, Save, View options, KWIC, Sentence, Sort, Left, Right, Node, References, Shuffle, Sample, Filter, Sub-hits, 1st hit in doc, Frequency, Node tags, Node forms, Doc IDs, and Text trees. The main results area shows a query of "it, can, be, said" with 58 results (6.96 per million). The results are displayed as concordance lines, with the phrase "it can be said" highlighted in red in each line. The lines are numbered 1 through 10, and the interface includes pagination controls (First, Previous, Page 3 of 3, Go).

Figure 6 – BAWE concordance lines for “it can be said.” (<https://ca.sketchengine.co.uk/open>)

Overall, it is crucial that students engaging with EAP writing, especially argumentative, be aware of the resources—mainly interpersonal metadiscourse markers—they can deploy to modulate a) their commitment to the truth of the proposition; b) the illocutionary force of the utterance; and c) its deictic origin, that is, its I-here-now, or their self-ascription of responsibility for it (see Bühler, 1934 and Benveniste 1970, cited in Caffi, 1999). In other words, they should realize that the type of writers (or speakers) they want to be and/or are taken for largely depends on the way they use such resources. In this respect, Thompson (2001, pp. 71–72) suggests going through students’ texts with the students themselves, to decide “whether each proposition... was meant to be seen as [them] speaking, and which could be assigned to the reader, or a third person” (Thompson, 2001, p. 71). Drawing on Thompson’s suggestions for the revision of students’ papers, in Table 2 we have formulated possible questions that can be asked to the students who produced, respectively, 1, 2, and 3 in Figure 3.

Table 2 – Whose opinion? (adapted from Thompson, 2001).

| | Writer | Reader | Other |
|---|---|--------|-------|
| 1 | Who believes gas drilling is a safe economic bet? | | |
| 2 | Who supposes this incentive (the minimum wage) will be beneficial to everyone? | | |
| 3 | Who assumes minimum wage raises are a good idea under the conditions described? | | |

Guided activities of this kind can help learners make their line of argument clearer by striking a balance between a “monologic ‘logical’ argumentation” and a “dialogic collaborative” one (Thompson, 2001, p. 74). Within these activities, the analysis of metadiscourse patterns in larger (learner) corpora or subsets thereof, particularly partitions by text type/genre and discipline, is likely to enhance students’ awareness that “effective argument involves a community-oriented deployment of appropriate linguistic resources to represent writers, their texts, and their readers” (Hyland, 2004, p. 148).

5. Conclusions

In this paper, we have discussed the use of metadiscourse markers in a learner corpus of opinion articles written by undergraduates in economics at the Free University of Bozen-Bolzano. For reasons of space, we were only able to show a limited number of examples from the corpus, which, however, allow for some general observations to be made on how EFL learners with an upper intermediate level of proficiency manage text organisation/topic development and writer’s positioning within academic argumentative texts. Building and searching a learner corpus enabled us to analyse students’ preferred textual and rhetorical patterns. In particular, the examples illustrated in Sections 4.1 and 4.2 show that even language features that tend to be taken for granted (as acquired) at a rather high level of proficiency may be problematic in terms of

both well-formedness and use in context. For instance, the tendency to over-use, underuse, or misuse specific *textual metadiscourse markers* may be teacher-induced or due to cross-linguistic reasons (as pointed out by Granger, 2002, p. 22), but what is beyond doubt is that searching the compiled learner corpus for these markers will give both the learner and the instructor a better grasp of how significant any such tendency is and, as a consequence, what measures should be taken and at what level (individual vs. class) to tackle specific difficulties. Similarly, the use of certain *interpersonal metadiscourse markers* may be the result of either conscious choices or unreflective practices, but a close look at collocation patterns within the learner corpus will make it possible to spot discrepancies both within texts and between texts and thus assess learning (and teaching!) gaps. Based on these observations, syllabuses can be adjusted or redesigned. At a first, basic level, the input provided by ad hoc learner corpora can be a precious resource to be used with similar-type learners at a later stage (see Section 2 above), as was the case with our corpus, which provided copious examples supporting specific instruction on textual and interpersonal metadiscourse (especially hedging language) during the courses taught at the Faculty in the year that followed the compilation of the corpus itself. However, the activities illustrated in Sections 4.1 and 4.2 may also be conducted on a regular basis in the classroom (and/or during other contact hours), and material from learner corpora may be systematically incorporated in lesson planning for use with the same learners who produced it, so as to boost formative assessment allowing for both collective and individualised feedback and encouraging students to engage with both peer and self-evaluation, which they may not be used to. In addition, the possibility of analysing what they have written against large learner corpora like the BAWE and the MICUSP, as opposed to general reference corpora, is likely to increase students' motivation by exposing them to language produced by other learners (who may be native speakers or more advanced learners of English, but are still learners in writing classes!), while at the same time providing a wealth of examples of texts written for specific and academic purposes. Ultimately, learner corpora can be said to be conducive to a more informed use of language based on the communicative needs warranted by the TLU domain in which students live and work.

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